What Is Claimed Is:

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1. A system for providing a client with access to remote graphics rendering resources, comprising:

a remote rendering control system that receives graphics instructions, generates modified graphics instructions on the basis of said graphics instructions, and outputs said modified graphics instructions to said graphics rendering resources.

- 2. The system of claim 1, wherein said remote rendering control system comprises a transparent interface to said graphics application, and wherein said transparent interface supports initialization of a graphics rendering session and accommodates client parameters during said graphics rendering session.
- 3. The system of claim 1, wherein said remote rendering control system comprises a data compression module that compresses said image data prior to sending said image data to said client.
- 4. The system of claim 1, wherein said remote rendering control system receives image data generated by said graphics rendering resources on the basis of said modified graphics instructions, and sends said image data to said client.
- 5. The system of claim 1, wherein said remote rendering control system receives graphics instructions from a graphics application program.
- 6. A method of remote graphics rendering on behalf of a client, comprising the steps of:
 - (A) initializing a graphics rendering session;

4		(B)	starting a graphics application on the basis of a command
5	from the clien	nt;	
6		(C)	generating graphics instructions;
7		(D)	imposing client parameters to produce modified graphics
8	instructions;		
9		(E)	sending the modified graphics instructions to graphics
10	rendering res	ources	;
11		(F)	rendering graphics on the basis of the modified graphics
12	instructions to	o produ	ace image data in one or more frame buffers;
13		(G)	reading image data from the one or more frame buffers;
14		(H)	enqueuing the image data; and
15		(I)	transmitting the image data to the client.
1	7.	The r	method of claim 6, further comprising the step of:
2		(J)	compressing the image data,
3	performed aft	er step	(H) and before step (I).
1	8.		method of claim 7, wherein steps (F), (J), and (I) are
2	performed in	pipelin	e fashion.
1	9.		method of claim 8, wherein steps (F), (J), and (I) are
2	asynchronous	•	
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1	10.		nethod of claim 6, wherein step (A) comprises the steps of:
2		(i)	performing a client / server handshake;
3		(ii)	receiving a client visual from the client;
4		(iii)	after a user at the client opens a console window at the
5	client and star		graphics application, opening client and server displays;
6		(iv)	merging the client visual with a server visual to form a
7	merged visual	list;	

8	(v)	assoc	ciating the client display with the graphics application;
9	(vi) overl	aying the server visual list with a transparent interface
10	routine;		
11	(vi	i) enab	ling the return of a client window to the graphics
12	application;		
13	(vi	ii) enab	ling the return of an internal context to the graphics
14	application; and		
15	(ix) bindi	ng a server context to the server window.
1	11. Th		of claim 10, wherein step (vii) comprises the steps of:
2		(a)	converting the merged visual list into a visual
3	appropriate for the	e client;	
4		(b)	defining the client window;
5		(c)	creating an internal data structure for tracking the
6	displayed location	of the cli	ent window; and
7		(d)	returning the client window to the graphics
8	application.		•
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1	12. The	e method o	of claim 10, wherein step (viii) comprises the steps of:
2		(e)	converting the merged visual list into a visual
3	appropriate for the	e server;	
4		(f)	creating a server context; and
5		(g)	returning an internal context to the application.
1	13. Th	e method	of claim 10, wherein step (ix) comprises the steps of:
2		(h)	extracting a server context from the internal
3	context;		
4		(i)	requesting a window allocation from a session
5	manager; and		
6		(j)	associating the server context with a server window.

1	14. The method of claim 6, wherein step (D) comprises the steps of
2	(x) intercepting every function call that includes a visual
3	capability;
4	(xi) converting the visual capability to a corresponding clien
5	visual capability;
6	(xii) intercepting every reference to a graphics context; and
7	(xiii) converting every reference to a graphics context to
8	reference to a graphics context of the client.
1	15. A computer program product comprising a computer usable
2	medium having computer readable program code that enables remote graphic
3	rendering on behalf of a client, said computer readable program code comprising
4	first computer readable program code logic for causing a server to
5	initialize a graphics rendering session;
6	second computer readable program code logic for causing the
7	server to start a graphics application on the basis of a command from the client
8	third computer readable program code logic for causing the server
9	to generate graphics instructions;
10	fourth computer readable program code logic for causing the
11	server to impose client parameters to produce modified graphics instructions;
12	fifth computer readable program code logic for causing the server
13	to send the modified graphics instructions to graphics rendering resources;
14	sixth computer readable program code logic for causing the
15	graphics rendering resources to render graphics on the basis of the modified
16	graphics instructions to produce image data in one or more frame buffers;
17	seventh computer readable program code logic for causing the
18	server to read image data from the one or more frame buffers;
19	eighth computer readable program code logic for causing the
20	server to enqueue the image data; and

21	ninth computer readable program code logic for causing the server
22	to transmit the image data to the client.
1	16. The computer program product of claim 15, said computer
2	readable program code further comprising:
3	tenth computer readable program code logic for causing the server
4	to compress the image data.
1	17. The computer program product of claim 15, wherein said first
2	computer readable program code logic comprises:
3	(i) computer readable program code logic for causing the server to
4	participate in a client / server handshake;
5	(ii) computer readable program code logic for causing the server
6	to receive a client visual from the client;
7	(iii) computer readable program code logic for causing the server
8	to open client and server displays after a user at the client opens a console window
9	at the client and starts the graphics application;
10	(iv) computer readable program code logic for causing the server
11	to merge the client visual with a server visual to form a merged visual list;
12	(v) computer readable program code logic for causing the server
13	to associate the client display with the graphics application;
14	(vi) computer readable program code logic for causing the server
15	to overlay the server visual list with a transparent interface routine;
16	(vii) computer readable program code logic for causing the server
17	to enable the return of a client window to the graphics application;
18	(viii) computer readable program code logic for causing the server
19	to enable the return of an internal context to the graphics application; and
20	(ix) computer readable program code logic for causing the server
21	to bind a server context to the server window.

1	18.	The computer program product of claim 17, wherein said computer	
2	readable prog	gram code logic (vii) comprises:	
3		(a) computer readable program code logic for causing the	
4	server to con	vert the merged visual list into a visual appropriate for the client;	
5		(b) computer readable program code logic for causing the server	
6	to define the	client window;	
7		(c) computer readable program code logic for causing the server	
8	to create an in	nternal data structure for tracking the displayed location of the client	
9	window; and		
10		(d) computer readable program code logic for causing the server	
11	to return the	client window to the graphics application.	
1	19.	The computer program product of claim 17, wherein said computer	
2	readable program code logic (viii) comprises:		
3		(a) computer readable program code logic for causing the	
4	server to conv	vert the merged visual list into a visual appropriate for the server;	
5		(b) computer readable program code logic for causing the	
6	server to crea	te a server context; and	
7		(c) computer readable program code logic for causing the	
8	server to retur	rn an internal context to the application.	
1	20.	The computer program product of claim 17, wherein said computer	
2	readable prog	ram code logic (ix) comprises:	
3		(a) computer readable program code logic for causing the server	
4	to extract a se	rver context from the internal context;	
5	•	(b) computer readable program code logic for causing the server	
6	to request a w	indow allocation from a session manager; and	
7		(c) computer readable program code logic for causing the server	
8	to associate th	e server context with a server window.	

1	21. The computer program product of claim 15, wherein said fourth
2	computer readable program code logic comprises:
3	(i) computer readable program code logic for causing the
4	server to intercept every function call that includes a visual capability;
5	(ii) computer readable program code logic for causing the
6	server to convert the visual capability to a corresponding client visual capability;
7	(iii) computer readable program code logic for causing the
8	server to intercept every reference to a graphics context; and
9	(iv) computer readable program code logic for causing the
10	server to convert every reference to a graphics context to a reference to a graphics
11	context of the client.